

Functions

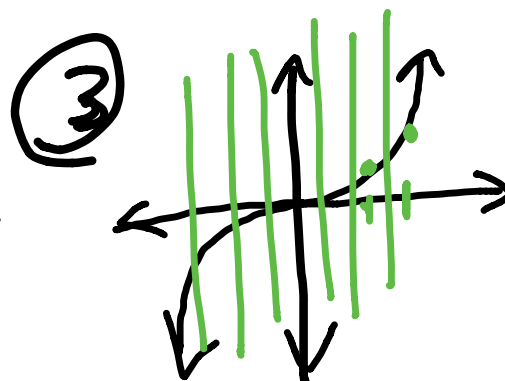
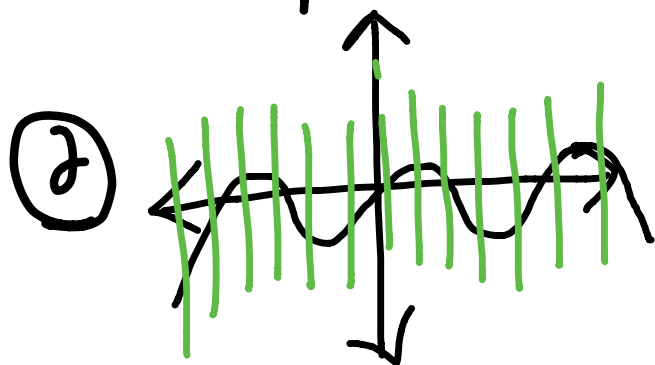
Definition: For every x-value there is exactly one corresponding y-value. Or worded another way.....For every independent variable there is one and only one dependent variable that corresponds to it.

The **dependent** variable is a function of the independent variable.

Examples of Functions:

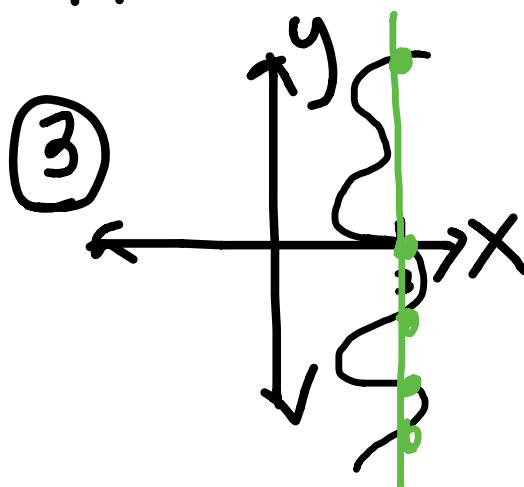
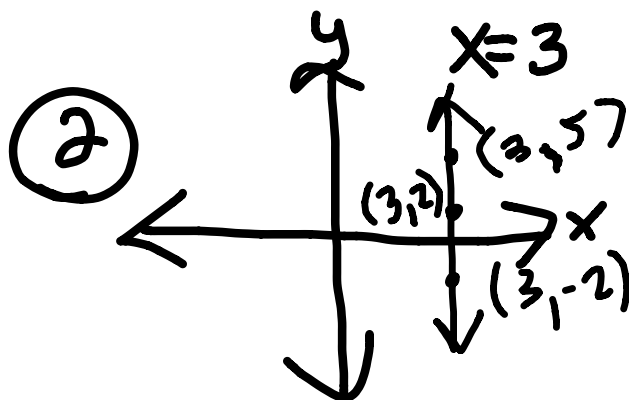
①

x	2	7	10	20	-4	7
y	8	1	8	1	8	1



Examples that are NOT Functions:

①	x	1	2	3	2	4	1
	y	8	7	9	10	6	12



Vertical line test:

To test to see if a graph is a function draw a vertical line to see if more than one y-value corresponds to each x-value.

* $f(x)$ is a function of x

* y is a function of x

* $\text{Dependent variable}$ is a function of the $\text{independent variable}$

